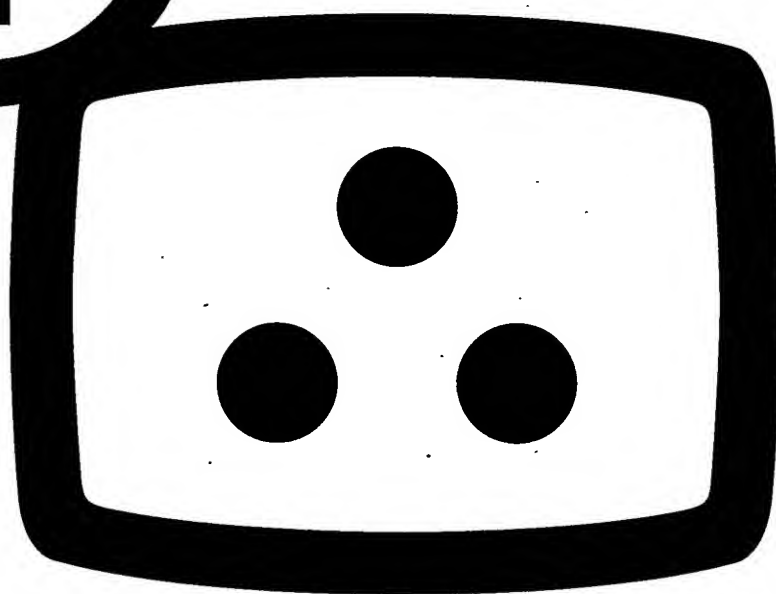


000000000000936

tv



L2 PW 96.31/12



**PHILIPS**

Printed on recycled paper



CODE ARTICLE  
ARTIKEL KODE  
736 606 32

N° BULLETIN  
DOKUMENT Nr  
66600002

19

6

MAG. LOC.  
02 S/U RACE95

LL

E/I

QUANTITE  
HOEEVEELHEID  
2

PRIX - PRIJS

T.V.A.  
B.T.W.

Service  
Service  
**Service**



# Contents

## Installation

Preparation	3
Switch TV on	4
Select your Menu language	5
Search for and Store TV channels	
Automatic installation	6
Manual installation	7
Reshuffle the programme list	9
Select favourite TV channels	10
Install TV configuration	10
Define decoder/descrambler programme numbers	12

## Operation

Operation	13
Main Menu	14
Adjust the picture	14
Adjust the sound	16
Features	20
Other Functions	24
PiP - Picture in Picture	30
Teletext	32

Connect peripheral equipment	35
Tips	42
Index	43

# Your remote control

## Menu p.13

MENU menu on/off

- ◀▶ select your choice
- OK activate your choice

- p.39 selection of EXT1, EXT2, EXT3 or FRONT.
- M** selection of connected peripheral equipment
- TV** TV operation

- p.13 volume key
- sound temporarily switched off

- p.24 picture format
- p.26 bilingual choice
- p.32 continuous subtitles

## Teletext

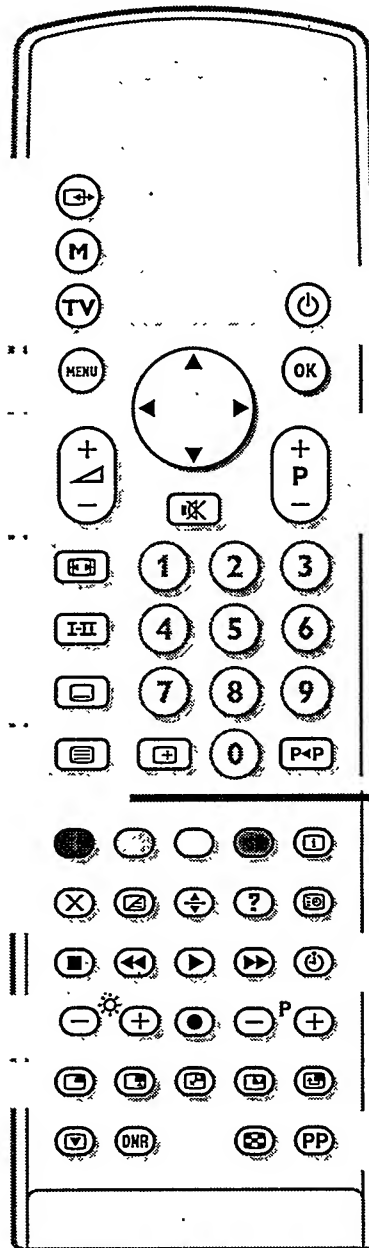
- p.32 teletext on/off
- direct txt page or subject selection
- txt index page
- interrupt txt page
- mix tv/txt picture
- enlarge
- solution to riddles
- time display
- brightness

p.27

## Picture In Picture

[for TV-sets with pip]

- switch pip on/off
- select connections
- switch screens
- still picture
- move pip screen
- P** channel selection of pip screen



switch to standby p.13

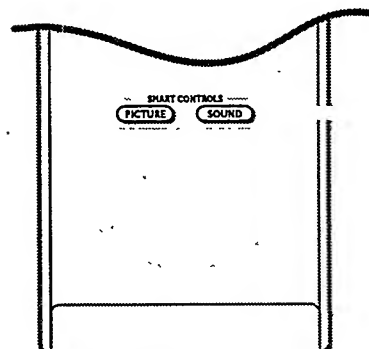
**P** TV-channel selection p.13

info on screen p.26,27  
**P<P** previous programme

## Video recorder

- stop p.41
- rewind
- play
- wind
- programme timer
- record

- freeze the picture p.27
- DNR** reduce image noise p.28
- mosaic screen p.29
- PP** personal preference p.28



**SMART CONTROLS** picture and sound settings p.14, 16


# Installation

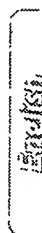
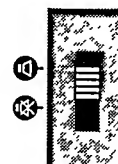
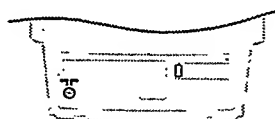
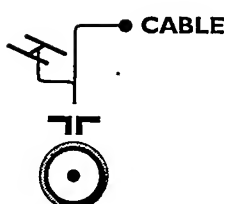
## Preparation


Place the TV on a solid surface.

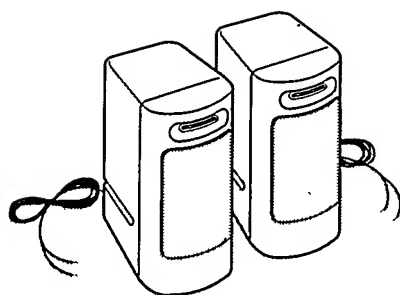
For ventilation, leave a space of at least 5 cm free all around the set.

To prevent any fault and unsafe situations, please do not place any objects on top of the set.

Insert the aerial plug tightly into the aerial socket  at the back of the TV with an aerial cable of good quality.

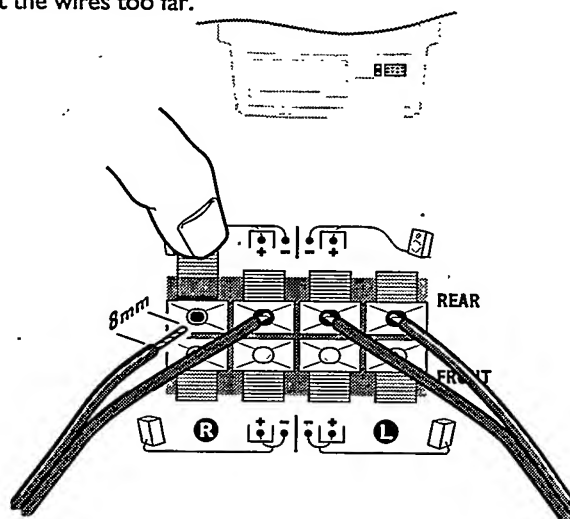


- Check if the loudspeaker switch at the back of the TV is in the  position.



### Surround Sound loudspeakers

- Connect the two Surround Sound rear loudspeakers supplied to the connector clips at the back of the TV. Always connect both Surround Sound loudspeakers.
- Connect the left rear loudspeaker at **REAR L** and the right rear loudspeaker at **REAR R** at the back of the set.
- Push the connector clip down and insert the end of the wire into the opening: the positive wire (the one with the black line) to the red loudspeaker connection; the negative wire to the black loudspeaker connection. Do not insert the wires too far.



The Surround Sound loudspeakers should always be located behind or to either side of the listener. If preferred you can also hang the loudspeakers on the wall.

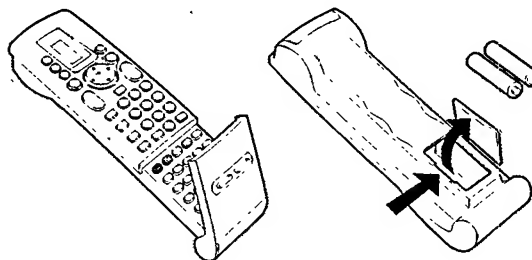
Insert the mains plug in the wall socket with a mains voltage of 220V-240V.

## Remote control

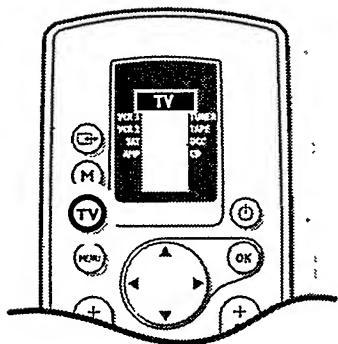
Remove the cover of the battery compartment on the back of the remote control.

Insert the 2 batteries supplied (Type R03G-1,5V).

Click the cover back into place.



*The Philips batteries supplied do not contain the heavy metals mercury and cadmium. Nevertheless in many countries exhausted batteries may not be disposed of with your household waste. Please inform yourself on how to dispose of exhausted batteries according to local regulations.*



- Press the **TV** key next to the display.
- ▷ In the display of the remote control the letters **TV** appear in a black block for a few seconds.

You can now operate your TV with the remote control.

*Should your remote control be lost or broken you can still select TV channels, adjust the volume and modify some basic picture and sound adjustments with the keys **PROGRAM**, **VOLUME** and **LOCAL MENU** behind the front door of your TV. See page 19.*

## Switch TV on

- Press the power switch ① on the front of your set.
- ▷ A green or red lamp lights up on the front of your set.

green ..... **or** red .....

- ▷ The TV is switched on.  
The screen lights up after a few moments.
- ▷ The TV is switched on but the screen stays dark. Your TV is on standby.
  - Press a digit key on the remote control.
  - ▷ The TV switches on.  
The screen lights up.
- ▷ The green lamp blinks every time you press a key on the remote control.



# Select the menu language

You can now choose which language the menus are presented in. When you switch on your set **for the first time**, the **MENU LANGUAGE** automatically appears on the screen. See the explanation on your screen. Alternately the explanation automatically appears in the different languages. If the **MENU LANGUAGE** menu does NOT automatically appear on the screen, proceed as follows :

MAIN MENU	
PICTURE	
SOUND	
FEATURES	
PROGRAMMES	
INSTALLATION	
INSTALLATION	Menu Language Country Automatic Installation Manual Installation Give Name Reshuffle Favourite Programmes TV Configuration Decoder/Descrambler
MENU LANGUAGE	English ... .. ... .. ... ..

- Press **MENU** on the remote control.
  - ▷ The **MAIN MENU** appears on the screen.
  - Keep the key **▼** pressed and select **INSTALLATION**.
  - ▷ **INSTALLATION** lights up.
  - Press **OK**.
  - ▷ The **INSTALLATION** menu appears and **Menu Language** lights up.
  - Press **OK**.
  - ▷ The **MENU LANGUAGE** appears.
  - Select the language of your choice with the keys **▲**, **▼**, **▶** or **◀** and press **OK**.
  - ▷ The **INSTALLATION** menu reappears.
- From this point on, all menus are presented in the language of your choice.

*Have you pressed the wrong key ?  
Press **OK** again and make a new choice.*

# Select Country

- Press the keys **▼** or **▲** to select **Country**.
- ▷ **Country** lights up.
- Press **OK**.
- ▷ The **COUNTRY** menu appears.
- Select the country where you are now located with the keys **▼**, **▲**, **◀** or **▶** and press **OK**.
- Select **Other** when none of the countries applies.
- ▷ The **INSTALLATION** menu reappears.

COUNTRY	UK ... .. ... .. ... .. Other
---------	-------------------------------------

# Store TV channels

This can be done in two different ways : automatically or manually.

## Automatic installation ..... **OR** Manual installation

All TV channels are searched for and stored automatically. If connected to a cable system or a TV channel which transmits the correct information a programme number and a name is attributed automatically as well and filled in in the programme list.  
If you wish the order of programme numbers and names of stored TV channels can be modified afterwards.  
Follow very closely and step by step the instructions of the Automatic Installation.

With manual installation it is possible to select whether TV channels are searched for by frequency or channel number.

Follow very closely and step by step the instructions of the Manual Installation procedure.  
You must go through every step.

Go on to page 7.

## Automatic installation

- Select **Automatic Installation** with the keys ▲ or ▼ and press **OK**.
- ▷ The menu **AUTOMATIC INSTALLATION** appears.
- Press **OK** again.
- Press the keys ◀ or ▶ to select **On**.
- ▷ The message **Searching** appears as the TV searches for all the channels available in your area.

*The automatic installation can be interrupted by pressing the **MENU** key.*

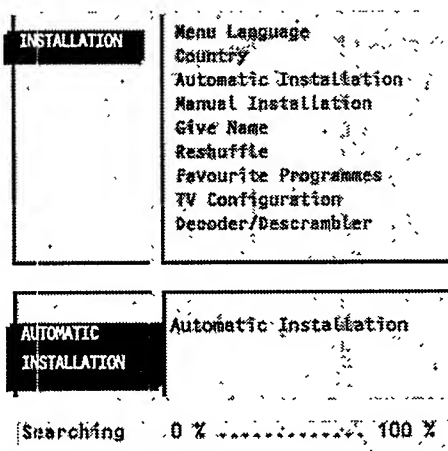
- ▷ Every time a TV channel is found it is automatically placed under the next free programme number in the programme list.
- ▷ The message **Ready** appears on the screen when the automatic installation is complete. The programmes are stored in the programme list after the message has disappeared.

If a cable system or a TV channel transmitting a teletext page with the frequencies and programme names of all the TV channels which can be received, is detected, the search is stopped and a programme list appears. The programme list is automatically filled with all the programme numbers and names of the TV channels transmitted.

*It is possible that the cable company or the TV channel displays a broadcast selection menu. Layout and items are defined by the cable company or the TV channel. Make your choice of the presented possibilities with the keys ▼ or ▲ and press **OK**.*

- Press **MENU**.
- ▷ The **INSTALLATION** menu reappears.

Go on to page 9.



.....	0	5	10
.....	1	6	11
.....	2	7	12
.....	3	8	13
.....	4	9	...
<b>MANUAL INSTALLATION</b>	Selection Mode		
	System		
	Search		
	Programme No.		
	Store		

## Manual installation

- Select **Manual Installation** with the keys ▲ or ▼ and press **OK**.
- ▷ The **MANUAL INSTALLATION** menu appears.  
In the left upper corner of the screen a programme number, a system, a frequency or possibly a channel number are displayed.
- ▷ **Selection Mode** is only present and lights up if the country you selected in the **COUNTRY** menu also offers the channel option.  
In this case you can choose either channel or frequency mode.
- Press the keys ◀ or ▶ to select **frequency**, **C-channels** (aerial channels) or **S-channels** (broadcast by a cable company).

# 1

## Select the TV system

Television pictures are not broadcast in the same way in all countries. We speak of different television systems (PAL, SECAM, BGDKL, NTSC,...).

- Select **System** with the keys ▲ or ▼.

**You have your own aerial..... OR You are connected to a cable system**

- Select the country or part of the world from where you want to receive the TV channel with the keys ▶ or ◀.
- Select the country or part of the world where you are now located.

Go on to 2.

# 2

## Search for a TV channel

- Select **Search** with the keys ▲ or ▼ and press **OK**.
- ▷ The TV searches for a channel.
- ▷ The frequency or the channel number increases until a TV channel is found.  
Dependent on the choice you made in the selection mode the searching stops at a frequency or at a channel number.
- ▷ In the bar, which may appear briefly at the bottom of the screen, the broadcaster may transmit its programme name or another message.
- Press **[+]** of the remote control to recognise which programme is being broadcast.
- ▷ The menu **MANUAL INSTALLATION** disappears temporarily.

Is the reception poor ?

You may be able to improve the reception of picture and sound of a TV channel by adjusting the frequency with the **P** - or **+** key on the remote control. The frequency is adjusted in the block shown in the upper left corner of the screen.

Go on to 3 if you want to store the channel that has been found.

Do you want a different channel ?

- Press **OK** again to restart the search.

No channel found ?

- Interrupt the search by pressing the keys ▲ or ▼ or the **MENU** key.  
Check that you have selected the correct TV system or that the aerial is connected properly. See Tips p. 42.

### Direct selection of a TV channel

If you know the frequency, or the C- or S-channel number, it can be entered directly with the digit keys on the remote control and in this way call up the TV channel.

Ask for a list from your cable company or dealer, alternatively consult the Table of frequencies on the inside backcover of this handbook.

- Select **Search** with the keys ▲ or ▼.
- Enter the 3 digits of the desired frequency or the 2 digits in case of C- or S-channels.
- For frequencies under 100 MHz, first enter a 0. For example : 063.
- ▷ The frequency is automatically finetuned.

*Have you entered a wrong number ?*

*First complete the frequency or the channel number with arbitrary numbers and then start again.*

Go on to 3.

## 3

### Enter the programme number

Now assign a number of your choice to the TV channel you have located. In this way you decide the order of all your TV channels.

- Select **Programme Number** with the keys ▲ or ▼.
- Select with the keys ◀ or ▶ or with the digit keys the desired programme number.

Go on to 4.

## 4

### Store steps 1 to 3

Now the steps 1 to 3 must be stored in the memory.

- Select **Store** with the keys ▲ or ▼ and press **OK**.
- ▷ **Stored** appears briefly at the bottom of the screen.
- ▷ The programme number and probably the programme name are stored in the programme list after the message has disappeared.

### repeat

If you want to store another TV channel.

- Repeat 1 to 4.

If you are connected to a cable system.

- Begin immediately with 2. You have already selected the TV system in 1 for all channels.

### end

If you have finished storing TV channels.

- Press **MENU**.
- ▷ The **INSTALLATION MENU** reappears.

# Enter or modify a programme name

It is possible to change the name stored in the memory or to assign a name to a TV channel which has not yet been entered. A name with a maximum of 5 letters or numbers can be given to the programme numbers 0 to 99. For example SUPER, BBC1,...

Between 99 and 0, you can also name any peripherals that are connected.

GIVE NAME		
90	EXT1	0
91	EXT2	1 BBC1
92	EXT3	2 BBC2
93	FRONT	3 ....
94		4 ....
95		5 ....
96		.....
97		
98		
99		

- Select **Give Name** with the keys ▲ or ▼ and press **OK**.
- ▷ The **GIVE NAME** menu appears.
- Select the TV channel to be modified or assigned a name with the keys ▲, ▼, ► or ◀ and press **OK**.
- ▷ A block appears on the first position of the name.
- Select with the keys ► or ◀ the position of the letter or number you want to change or to enter.
- Select with the keys ▲ or ▼ the letter or number you want to enter or to correct. A space, numbers or other special characters are located between Z and A.

*Did you fill in a wrong letter or number ?*

Select with the keys ► or ◀ the position of the letter or number you want to modify.

Select with the keys ▲ or ▼ the correct letter or number.

When the complete name is filled in.

- Press **OK**.
- Select another TV channel to be modified or assigned a name with the keys ▲, ▼, ► or ◀ and press **OK**.
- Repeat as described above.

When you have finished entering or modifying programme names.

- Press **MENU**.
- ▷ The **INSTALLATION** menu reappears.

# Reshuffle the programme list

According to your preference you can change the order of the stored TV channels.

When you are satisfied with the order of the programme list, go to page 10.

RESHUFFLE		
90 ... 0 ...	10 ...	
91 1 BBC1	11 ...	
92 2 BBC2	12 ...	
93 3 ...	13 ...	
94 ..... 14 ...		
95 ..... 15 ...		
96 ..... .....		
97		
98		
99		

- Select **Reshuffle** with the keys ▲ or ▼ and press **OK**.
- ▷ The menu **RESHUFFLE** appears.
- Select the TV channel you want to change the programme number of with the keys ▲, ▼, ◀ or ► and press **OK**.
- Use the keys ◀ or ► to select another column of the programme list.
- ▷ The programme number and the name of the TV channel appear in a black block.
- Use the keys ▲, ▼, ► or ◀ to move to the number where you want to locate the TV channel.
- Press **OK**.
- ▷ The TV channel moves to the selected programme number.  
The TV channel which was located on that position automatically moves to the programme number of the TV channel you have modified.
- Repeat this for all the other TV channels you want to swap.
- When all the TV channels are allocated as you like.
- Press **MENU**.
- ▷ The **INSTALLATION** menu appears again.

# Select Favourite TV channels

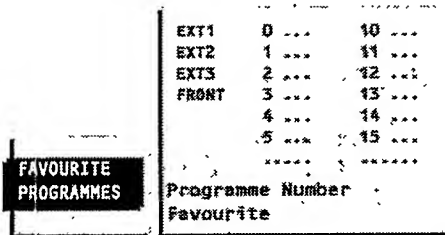
During the installation all the stored TV channels have automatically been placed into the favourite list.

This will make selection of only your favourite TV channels a lot easier and faster.

In the Favourite Programmes menu you can indicate for each TV channel if you want to keep that TV channel as a favourite.

You can also do this for a programme number reserved for the programmes you receive from your decoder.

After leaving the installation you can quickly run through the TV channels by pressing the **P** - or **+**. Only those TV channels which are in the favourite list will be displayed. The non-favourite TV channels can still be selected with the digit keys.

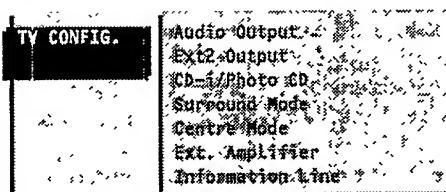


- Select **Favourite Programmes** with the keys **▲** or **▼** and press **OK**.
- ▷ The **FAVOURITE PROGRAMMES** menu appears.
- ▷ **Programme Number** lights up.
- Select the programme number of a TV channel with the digit keys.
- Select **Favourite** with the keys **▲** or **▼**.
- Press the keys **►** or **◄** to select **Yes** or **No**.
- In this way you decide whether you want to keep the selected TV channel as a favourite TV channel or not.
- Repeat this for every TV channel you like to change into a favourite or a non-favourite TV channel.
- Press **MENU** again if you have finished selecting TV channels in the favourite list.
- ▷ The **INSTALLATION** menu reappears.

# Install TV Configuration

Different options can be selected depending on the different peripheral equipment you may have connected to your TV.

- Select **TV Configuration** with the keys **▲** or **▼** and press **OK**.
- ▷ The **TV CONFIG.** menu appears and **Audio Output** lights up.



## Audio Output

If you have audio equipment or another external sound source connected to your TV, you can select two types of audio output.

- Select **Variable** with the keys **►** or **◄** if you want to adjust the volume of your audio equipment via the TV.
- Select **Constant** if you want to adjust the volume with the volume control of your audio equipment.

## Ext2 Output

See Record with your video recorder, p. 40.

## CD-i/Photo CD

See Connect Peripheral Equipment, TV and a CD-i/Photo CD, p. 36.

# TV CONFIG.

Audio Output  
Ext2 Output  
CD-i/Photo CD  
Surround Mode  
Centre Mode  
Ext. Amplifier  
Information Line

The following items deal with the installation of the Dolby Surround Sound possibilities.

- Select with the keys ▲ or ▼ the desired menu possibility.
- Select with the keys ◀ or ▶ the desired menu adjustment.

## Surround Mode

Loudspeakers active ?

	Centre Mode	Ext. Amplifier	Front TV L & R	Front TV Centre	Rear L & R
<b>Pro Logic</b> (with Pro Logic broadcasting)	<input checked="" type="radio"/> Normal		<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> Yes
	Phantom		Yes	No	Yes
	Wide		Yes	Yes	Yes
	<input type="radio"/> No				
<b>Dolby 3 Stereo</b> (with stereo broadcasting)	<input checked="" type="radio"/> Normal		<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> Yes	<input type="radio"/> No
	Phantom		Yes	No	No
	Wide		Yes	Yes	No
	<input type="radio"/> No				
<b>Hall</b> (with mono broadcasting)	<input checked="" type="radio"/> Normal		<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> Yes
	Phantom		Yes	No	Yes
	Wide		Yes	No	Yes
	<input type="radio"/> No (to select in Surr. mode Pro Logic or Dolby 3 Stereo)				
<b>Off</b>	Normal		Yes	No	No
	Phantom		Yes	No	No
	Wide		Yes	No	No
	<input type="radio"/> No (to select in Surr. mode Pro Logic or Dolby 3 Stereo)				

# TV CONFIG.

Audio Output  
Ext2 Output  
CD-i/Photo CD  
Surround Mode  
Centre Mode  
Ext. Amplifier  
Information Line

## External amplifier

You have connected an audio amplifier to **AUDIO L** and **R** at the back of your TV. See Connect Peripheral Equipment, Audio equipment, p. 36.

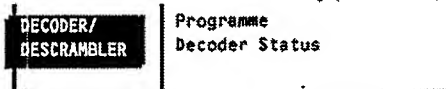
- Select
  - Surround Mode : **Pro Logic** or **Dolby 3 Stereo**
  - Centre Mode : **Normal** or **Wide**
  - Ext. Amplifier : **Yes**

## Information Line

- Select **Information Line** with the keys ▲ or ▼ and press **OK**.
- Press the keys ◀ or ▶ to select **On**.
- After the selection of a TV channel or after pressing the key **[+]** on the remote control, a TV channel which broadcasts teletext may transmit the name of the TV channel or the programme name or another message which appears briefly in the information line at the bottom of the screen.
- Press the keys ◀ or ▶ to select **Off**.
- The information line will only appear after pressing the key **[+]** on the remote control, see p. 26, and not after the selection of a TV channel.
- Press **MENU**.
- The **INSTALLATION** menu reappears.

# Define Decoder/Descrambler prog. numbers

If you have connected a decoder or a descrambler, see p. 38, you can define one or more programme numbers as decoder programme numbers.



- Select **Decoder/Descrambler** with the keys ▲ or ▼ and press **OK**.
- ▷ The **DECODER/DESCRAMBLER** menu appears.
- Select **Programme** with the keys ▲ or ▼.
- ▷ **Programme** lights up.
- Select the programme number under which you have stored the programme coming from your decoder with the digit keys.
- Select **Decoder Status** with the keys ▲ or ▼.
- ▷ **Decoder Status** lights up.
- Press the keys ► or ◀ to select **Off**, **EXT1** or **EXT2**, the euroconnector where you connected your decoder.  
Select **Off** if you do not want the selected programme number being activated as a decoder programme number.

## Fast exit from the menus

- Keep the **MENU** key pressed to switch off all menus.



# Operation

To be operational with the remote control your TV should be in the TV operation position.

If this is not the case, first press the **TV** key left of the display. The letters **TV** in the display of the remote control appear in a black block for a few seconds.

Every time you press a key on the remote control, a green lamp on the front of your TV set blinks.

## Switch TV on

- Press **⏻** on the front of your TV.
- ▷ A green lamp lights up and the programme appears.
- ▷ Does a red lamp light up? Your TV is on standby. Read on.

## Switch to standby

- Press the red standby key **⏻** at the top of the remote control to switch the TV off temporarily.
- ▷ A red lamp on the TV lights up.
- Press the digit keys or **P -** or **+** in order to switch the TV on again. If for a period of 10 minutes no aerial signal is received, then your set automatically switches to standby.

*Your TV consumes energy in the standby mode. Energy consumption contributes to air and water pollution. We advise to switch off your TV overnight instead of leaving it on standby. You save energy and the picture tube is demagnetised which maintains good picture quality.*

## Select TV channels

- Select the TV channel with the digit keys or with the key **P -** or **+** on the remote control.
- For a two digit programme number, enter the second digit within 2 seconds.
- Quickly run through the TV channels from the Favourite list.
- Press the **P -** or **+** key repeatedly.

## Adjust the volume

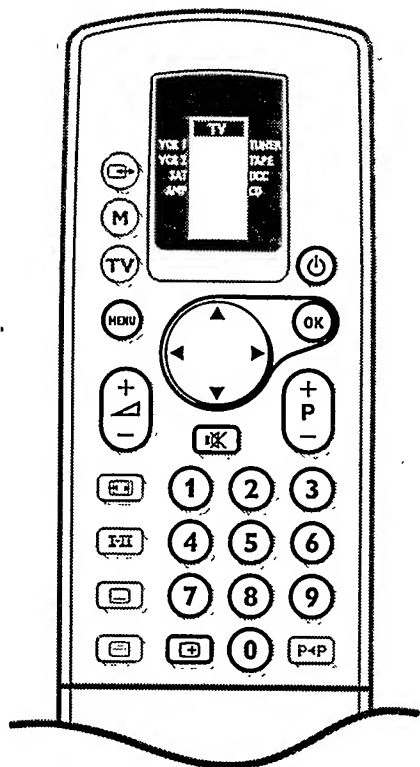
- Press **▲** - or **+**.
- If you want to store the volume adjustment in the memory, see the Features menu, General PP Store, p. 20, to store the same volume adjustment for all the stored TV channels.

## Temporarily interrupt the sound

- Press **⏻**.
- ▷ The sound is temporarily interrupted.
- Press **⏻** again to get the sound back.

## Switch menus on and off

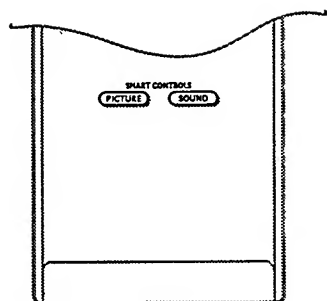
- Press **MENU** on the remote control.
- ▷ The **MAIN MENU** appears.
- Use the keys **▲** and **▼** to make a selection of the Main Menu items.
- ▷ Your selection lights up.
- Press the **OK** key on the remote control to activate the selected menu.
- Press **MENU** again to return to the previous menu.
- Keep the **MENU** key pressed to switch off all menus.



# Main Menu

## Select the picture settings

During manufacture four types of picture setting have been pre-defined. You can choose between these four different settings with the **PICTURE** key of the smart controls on the door of the remote control.



- Press the Smart Controls' key **PICTURE** repeatedly to select : **Soft**, **Natural**, **Rich** or **Personal**.
- ▷ The picture setting possibilities are displayed briefly on top of the screen. The picture settings correspond with a specific predefined setting of Contrast, Colour, Sharpness and Dynamic Contrast. **Personal** refers to the personal preference settings of contrast, colour, sharpness and dynamic contrast you can adjust in the **PICTURE** menu and store with **General PP store** in the **FEATURES** menu.

MAIN  
MENU  
  
PICTURE  
SOUND  
FEATURES  
PROGRAMMES  
INSTALLATION

## Adjust picture settings

- Press **MENU** on the remote control.
- ▷ The **MAIN MENU** appears and **PICTURE** lights up.
- Press **OK**.
- ▷ The **PICTURE** menu appears.
- Select with the keys **▲** and **▼** the adjustments of **Contrast**, **Brightness**, **Colour**, **Sharpness**, **Tint**, **Digital options** and **Dynamic Contrast** you want to change.

*When you are watching a TV channel in the NTSC-system, the option **Hue** also appears and can be adjusted in the **PICTURE** menu.*

- Press the keys **◀** or **▶** to alter the selected adjustment.
- ▷ The **PICTURE** menu disappears and only the selected menu item remains (including its bar) on the screen.
- ▷ The **PICTURE** menu reappears after a few moments or by pressing **OK**. Now you can select another adjustment with the keys **▲** and **▼**.
- ▷ The picture setting in the Smart Controls for **PICTURE** is set to **Manual** until the modified adjustments are stored.

PICTURE	
	Contrast
	Brightness
	Colour
	Sharpness
	Tint
	Digital options
	Dynamic Contrast

### Sharpness

The selected setting for Sharpness is stored only for the selected TV channel after the indication disappeared.

You can adjust the sharpness for each TV channel separately.

FEATURES	
	Sleeptimer
	Child Lock
	General PP store
	Message
	Timers
	Recording Source

If you want to store the modified adjustments for Contrast, Brightness, Colour, Tint and Dynamic Contrast for all TV channels.

- Press **MENU**.
- ▷ The **MAIN MENU** reappears.
- Select **FEATURES** with the keys **▲** or **▼** and press **OK**.
- ▷ The **FEATURES** menu appears.
- Select **General PP store** with the keys **▲** or **▼** and press **OK**.
- ▷ The message **Stored** appears briefly on the bottom of the screen.
- ▷ You have created and stored a new **Personal** picture setting.

#### Tint

- Press **◀** or **▶** to select the colour temperature : **Normal**, **Warm** or **Cool**.
- Press **OK**.
- ▷ The **PICTURE** menu reappears.

#### Digital Options

- Press the keys **◀** or **▶** to select **100 Hz**, **Dig. Scan** or **Natural Motion**.
  - **100 Hz** = 100 Hz only (Field flicker reduction)
  - **Dig. Scan** = 100 Hz + Dig. Scan (Field and line flicker reduction)
  - **Natural Motion** = 100 Hz + Dig. Scan + Natural Motion (Field and line flicker reduction and smooth movement reproduction)
- Although **Natural Motion** is the most ideal setting, it may be preferred to switch back to **Digital Scan** and/or **100 Hz**.
- ▷ The **PICTURE** menu reappears.

#### Dynamic Contrast

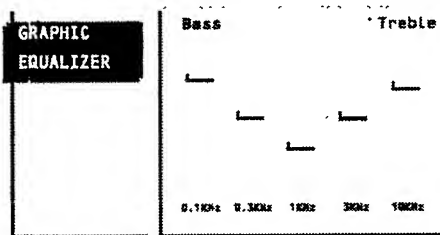
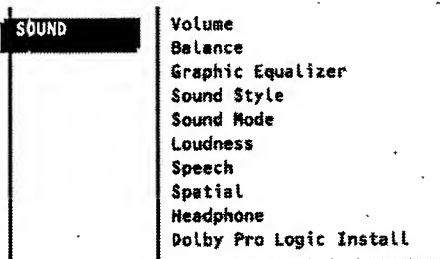
- Press the keys **◀** or **▶** repeatedly to select **Off**, **Min**, **Med** or **Max** and press **OK**.
- ▷ The **PICTURE** menu reappears.
- To make the contrast between darker and brighter picture parts more outspoken, it is preferred to select **Med** or **Max**.
- In certain circumstances it may be preferred to select **Min** or **Off**.

- Press **MENU**.
- ▷ The **MAIN MENU** reappears.
- Press **MENU** again to switch off the **MAIN MENU**.

## Select the sound settings

During manufacture 6 types of sound style have been pre-defined. You can choose between these six different styles with the **SOUND** key of the smart controls on the door of the remote control.

- Press the Smart Controls' key **SOUND** repeatedly to select : **In concert**, **Classic**, **Jazz**, **Pop**, **Stadium** or **Personal**.
- ▷ The sound styles are displayed briefly on the top of the screen. Each sound style corresponds with a specific predefined setting of the graphic equalizer.
- Personal** refers to the personal preference settings of volume, balance, treble and bass you can adjust in the sound menu and store with **General PP store** in the **FEATURES** menu.



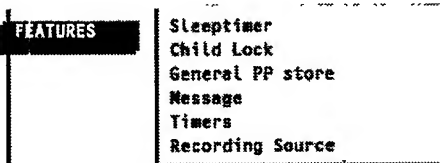
## Adjust sound settings

- Press **MENU** on the remote control.
- ▷ The **MAIN MENU** appears.
- Select **SOUND** with the keys **▲** or **▼** and press **OK**.
- ▷ The **SOUND** menu appears.
- Select with the keys **▲** or **▼** the adjustments of **Volume** and **Balance**.
- Press the keys **◀** or **▶** to change the selected adjustment.
- Select **Graphic Equalizer** with the keys **▲** or **▼** and press **OK**.
- ▷ The **GRAPHIC EQUALIZER** menu appears.
- Press the keys **◀** or **▶** to select an equalizer setting.
- Press the keys **▲** or **▼** to adjust the settings.
- ▷ The sound style is set to **Manual** until the modified adjustments of the graphic equalizer are stored.

### Select the sound styles with the sound menu

This menu item has the same function as the Smart Controls key **Sound** on the remote control as mentioned above.

- Select **Sound Style** in the menu **SOUND** with the keys **▲** or **▼**.
- Press the keys **◀** or **▶** to select the preferred sound style : **In concert**, **Classic**, **Jazz**, **Pop**, **Stadium** or **Personal**.



If you want to store the modified adjustments for all the TV channels.

- Select **Features** in the Main Menu with the keys **▲** or **▼** and press **OK**.
- ▷ The **FEATURES** menu appears.
- Select **General PP Store** with the keys **▲** or **▼** and press **OK**.
- ▷ The message **Stored** appears briefly on the bottom of the screen.
- ▷ You have created and stored a new **Personal** sound style.

### Select the sound mode

Depending on the sound the TV channel transmits and if your set is equipped with Nicam, your TV will choose between stereo or digital sound unless you make a sound choice.

In case of weak stereo or digital sound signals, due to the transmission, select analogue or mono.

- Select **Sound Mode** in the menu **SOUND** with the keys ▲ or ▼.
- Press the keys ◀ or ▶ to select the preferred sound mode :
  - **Stereo** or **Mono** if the channel transmits *stereo* sound
  - **Digital** or **Analogue** if the TV channel transmits *digital* sound.

### Switch Loudness on or off

When **Loudness On** is selected, the low and high frequencies are amplified so that the natural balance is restored when listening to low volume sound.

### Select Speech

When **Speech On** is selected, the treble settings are enhanced and the bass settings are suppressed.

### Select Spatial sound

When **Spatial On** is selected, it seems as though the loudspeakers are spread further apart from one another.

You get a spatial sound effect.

### Headphone selection

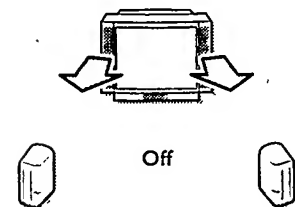
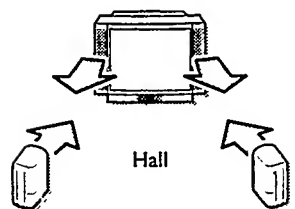
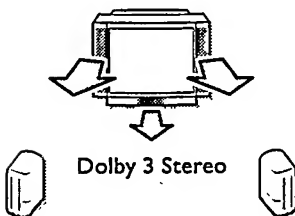
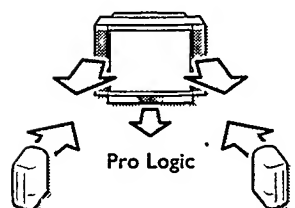
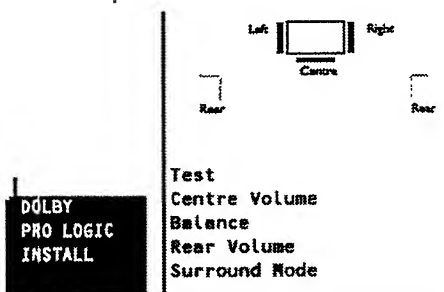
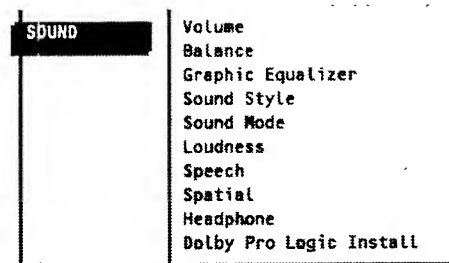
See Connect Peripheral Equipment, p. 37 for the connection of your headphone if you want to use it.

- Select **Headphone** with the keys ▼ or ▲ and press **OK**.
- ▷ The **HEADPHONE** menu appears.
- First select **Source** with the keys ▼ or ▲.
- ▷ **Source** lights up.
- Press the keys ◀ or ▶ to select the source you want to listen to with your headphone : **Automatic**, **TV**, **EXT1**, **EXT2**, **EXT3** or **FRONT**.
- Select **Automatic** if you want to listen to the sound of the picture you are watching on the screen.

*Exception : if you are watching a programme from an external source in the pip picture, you will hear this sound through your headphone.*

- Select **TV** when you want to listen to the sound of a TV channel via your TV tuner and watch a programme via your video recorder or other peripheral. E.g. you can watch a film from your video recorder, but listen to the commentary of a broadcasted football match.
- In all other cases select the source where you connected your equipment. The equipment should be switched on, but you don't need to watch it.
- Select with the keys ▼ or ▲ the adjustments **Volume** or **Balance**.
- ▷ The selected adjustment lights up.
- Press the keys ◀ or ▶ to regulate the selected adjustment.
- Press **MENU**.
- ▷ The **SOUND** menu reappears.





## Dolby\* Pro Logic Install

- Select **Dolby Pro Logic Install** with the keys ▼ or ▲ and press **OK**.
- ▷ The **DOLBY PRO LOGIC INSTALL** menu appears and **Test** lights up.

Most programmes will sound good with the volume balance between the centre, left and right and rear loudspeakers in an equally loud position. However, some programmes may benefit from an adjustment of the level of the respective speakers.


Which loudspeakers are active depends on the selection you have made in the TV-Configuration menu, p. 10.

- Select **Surround Mode** with the keys ▼ or ▲.
- Press the keys ◀ or ▶ to select **Pro Logic**.
- Select **Test** again with the keys ▼ or ▲.
- Press the keys ◀ or ▶ to switch **Test on**.
- ▷ A steady noise tone is switched sequentially through the left, centre, right and rear loudspeakers, for 2 seconds each. This enables you to adjust the volume of the separate loudspeakers.
- The loudspeakers activated light up in the on screen graphic.
- Select with the keys ▼ or ▲ **Centre Volume**, **Balance** or **Rear Volume**.
- ▷ The selected adjustment lights up.
- Press the keys ◀ or ▶ to alter the selected adjustment.
- Select **Test** again with the keys ▼ or ▲.
- Press the keys ◀ or ▶ to switch **Test off** again.

### Surround mode

- Select **Surround Mode** with the keys ▼ or ▲.
- ▷ **Surround Mode** lights up.
- Press the keys ◀ or ▶ to select the preferred surround mode : **Pro Logic**, **Dolby 3 Stereo**, **Hall** or **Off**.

### Pro Logic

- ▷ In addition to the left and right front speakers, the centre and the rear surround loudspeakers reproduce the Dolby Surround Pro Logic sounds. This 4-channel sound is always recorded when the movie or programme is marked with  **Dolby Surround**.
- This mode is especially recommended for such programmes or movies.

### Dolby 3 Stereo

- ▷ The Dolby 3 Stereo sound signal is now distributed over the front left, the front right and the centre loudspeakers.
- ▷ The rear loudspeakers do not produce any signal.


### Hall


- ▷ The centre sound signal is distributed over the rear loudspeakers which creates a hall effect from the rear.
- ▷ The centre loudspeaker does not produce any signal.
- This mode is recommended when you wish to add surround sound to a non Dolby Surround broadcast.

### Off

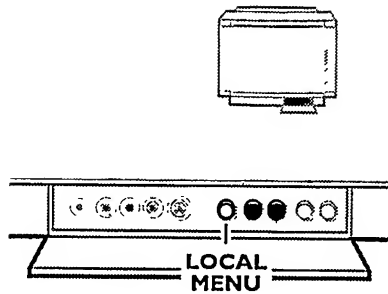
- ▷ This mode reproduces only the left and right front sound signals. You only hear a stereo sound if the broadcast which you are watching or listening to is transmitted in stereo or digital sound.

- Press **MENU** twice.
- ▷ The **MAIN MENU** reappears.

\*  **DOLBY SURROUND**  
PRO LOGIC

"Dolby" "Pro Logic" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.  
Manufactured under license from Dolby Laboratories Licensing Corporation.

## Adjust the basic picture and sound settings with the Local Menu key



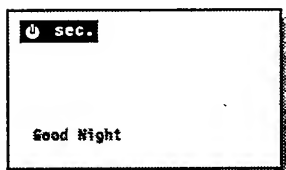
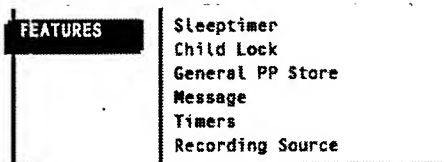
Should your remote control be lost or broken you can still change some of the basic picture and sound settings.

- Press the **LOCAL MENU** key behind the door at the front of the TV.
- ▷ The adjustment **Volume**, including a bar, appears on the screen.
- Press the key **V** - or + behind the door at the front of the TV, to adjust the volume.
- Press the **LOCAL MENU** key again or repeatedly to select a following adjustment.
- ▷ The adjustments **Volume**, **Brightness**, **Colour** or **Contrast**, appear on the screen.
- Press the key **V** - or + at the front of the TV to regulate the selected adjustment.
- Press the **LOCAL MENU** key again after you selected the last adjustment.
- ▷ The local menu adjustments disappear.

*The Local Menu automatically switches off when after 10 sec. no action has been executed.*

19

# Features



- Select **FEATURES** in the **MAIN MENU** with the keys ▼ or ▲ and press **OK**.
- ▷ The **FEATURES** menu appears.
- Use the keys ▼ and ▲ to make your selection in the **FEATURES** menu.
- ▷ Your selection lights up.

## Sleeptimer

With the aid of the sleep timer you can set a time period after which the TV should switch itself off to standby.

- Hold the ► key pressed down.
- ▷ The counter runs from **Off** up to **180 min.**
- Hold the ◀ key pressed down.
- ▷ The counter runs from **180 min.** down to **Off.**

If you have set a time, then one minute before the TV switches off the remaining minute automatically appears on the screen together with the message **Good Night**. You can always switch off your set earlier or change the set time.

## Child Lock

If the child lock is on, the TV can only be switched on with the remote control. The keys **P** - and + behind the door on the TV cannot be used. In this way you can prevent unauthorised use of your TV.

If the message **Child Lock ON** appears, the child lock must be switched off before you can use the keys **P** - and + on the TV.

- Press the keys ◀ or ► to select **On** or **Off**.

## General PP Store

- Select **General PP Store** with the keys ▼ or ▲.
- Press **OK**.
- ▷ **General PP Store** lights up and the message **Stored** appears briefly on the bottom of the screen.
- ▷ The adjustments of contrast, brightness, colour and dynamic contrast made in the picture menu and the adjustments of volume, balance and equalizer made in the sound menu are stored in memory for all the stored TV channels.



Message .....	
.....	
MESSAGE	Change
	Clear
	Type
	Run

### Message

With this function you can enter a personal message which will be displayed automatically when the set is switched on from standby.

E.g. *I'll be late this evening. Don't wait for dinner.*

- Select **Message** with the keys **▼** or **▲**.
- Press **OK**.
- ▷ The **MESSAGE** menu appears and consists of a message part and a selection menu.
- Select **Change** with the keys **▲** or **▼** and press **OK**.
- ▷ A block appears on the first position of the first message line.
- Select with the **▲** or **▼** keys the letter or number you want to enter.
- Select with the **►** key the next position.
- Enter the letters or numbers.
- You can enter text on 2 lines of 27 characters each.

*Did you fill in a wrong letter or number ?*

- Select with the **◀** or **►** keys the position of the letter or number you want to modify.
- Select with the **▲** or **▼** keys the correct letter or number.
- Press **OK** when you have entered the complete message.
- Press the **▲** or **▼** keys to make a different selection in the message menu.

### Remove message

- Select **Clear** and press **OK** to remove a previous message.
- ▷ The previous message is removed.

### Message type

- Select **Type**.
- ▷ **Type** lights up.
- Press the keys **◀** or **►** to select the way the message to be displayed : **Wipe**, **Slide**, **Fall** or **Fade**.

### Run message

- Select **Run**.
- ▷ **Run** lights up.
- Press the keys **◀** or **►** to select the displaying frequency : **Continuous**, **Once** or **No**.

### Display message

- Switch the TV to standby.
- ▷ The message appears on the screen the moment the TV is switched on again.
- When you selected **Once**, the message will disappear from the screen after 30 seconds.

When you selected **Continuous**, the message will appear on the screen continuously until the TV is switched off with the power key **Ⓢ** on the front of the TV.

The message does NOT appear when Continuous Subtitles have been switched **On** and **Ⓢ** is displayed on the bottom of the screen. See Teletext, p. 34.

<b>FEATURES</b>	Sleeptimer Child Lock General PP Store Message Timers Recording Source
-----------------	---

### Timers

With the Timers menu you can make your TV automatically switch to a specific programme number from standby or switch over to a different programme number at a specific time.

- Select **Timers** with the keys ▼ or ▲ in the **FEATURES** menu and press **OK**.
- ▷ The **TIMERS** menu appears and **Actual Time** lights up.

### Actual time

<b>TIMERS</b>	Actual Time Programme Start Time Cancel Timer
---------------	--

On prog. no 1 or under the lowest favourite programme number you have installed a TV channel which also broadcasts teletext. See Teletext, p. 32.

**or** On prog. no 1 or under the lowest favourite programme number you have installed a TV channel which does NOT broadcast teletext. See Teletext, p. 32.

- ▷ The time is downloaded from that TV channel.
  - In case you want to enter another time use the digit keys.
  - ▷ The time entered manually is updated every minute and remains until the TV set is switched off with the power key ①.
- ▷ The time is set to --:-- and should be set manually.
  - Enter the actual time with the digit keys.
  - ▷ The displayed time is updated every minute and remains until the TV set is switched off with the power key ①.

*If you filled in an incorrect digit.*

- First complete the actual time with arbitrary numbers and then start again.

### Programme

- Select **Programme** with the keys ▼ or ▲.
- ▷ **Programme** lights up.
- Enter with the digit keys the programme number of the TV channel you want your TV to switch over to.

*Have you entered a wrong number ?*

- Enter the right digit(s) again.

### Start time

- Select **Start Time** with the keys ▼ or ▲.
  - ▷ **Start Time** lights up.
  - Enter with the digit keys the start time of the selected TV programme you want your TV to switch over to.
- or**
- ▷ At the programmed time your TV will switch over from standby to the selected programme number.
  - ▷ The start time is reset to --:--.
- ▷ At the programmed time your TV will switch over to the selected programme number when you are watching another TV channel.
  - ▷ The start time is reset to --:--.

### Cancel timer

- Select **Cancel Timer** with the keys ▼ or ▲ and press **OK**.
- ▷ **Cancel Timer** lights up and the **Start Time** is reset to --:--.
- Press **MENU**.
- ▷ The **FEATURES** menu reappears.

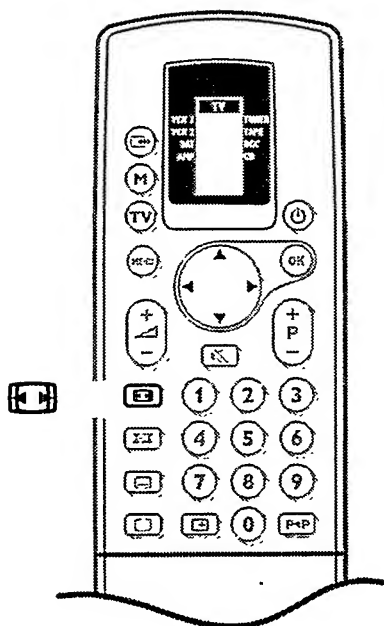
### Recording Source

See Peripheral Equipment, Recording with your video recorder, p. 40.

MAIN  
MENU  
PICTURE  
SOUND  
FEATURES  
**PROGRAMMES**  
INSTALLATION


## Select Programme list

- Select **PROGRAMMES** with the keys ▼ or ▲ in the **MAIN MENU** and press **OK**.
- ▷ A page with an overview of stored TV channels, together with the names you entered for the connected peripheral equipment appears.  
Programme numbers from the favourite list are displayed in white characters.  
Programme numbers which are not in the favourite list are displayed in black characters.  
The current TV channel on the screen is indicated with a black block.
- Press the keys ▼ or ▲ to select a TV channel within the column.
- Press the keys ◀ or ▶ to select another column of the programme list.
- Press **OK** to select the desired TV channel.
- Press **MENU** twice.
- ▷ The **MAIN MENU** disappears.



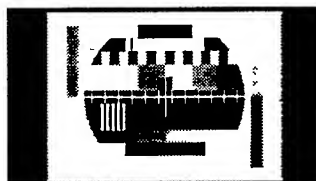
# Other functions

## Picture format

- Press  repeatedly to select a picture format :
  - a conventional 4:3 picture format
  - an expanded 14:9 picture format
  - a full expanded 16:9 (I) and (II) picture format
  - a super wide picture format
  - a wide screen picture format.
- ▷ The information 4:3, MOVIE EXPAND 14:9, MOVIE EXPAND 16:9 (I), MOVIE EXPAND 16:9 (II), SUPER WIDE or WIDE SCREEN appears briefly on the screen according to the selected picture format.

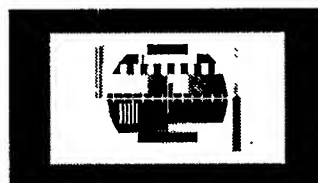
. Selected Picture format

**4:3**

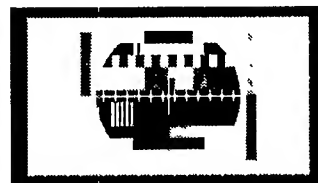
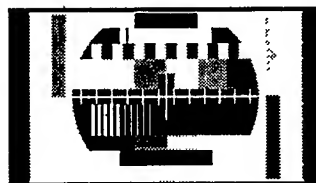


**4:3**  
transmission

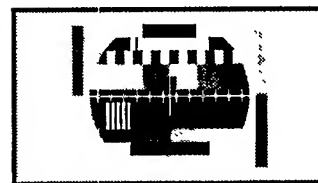
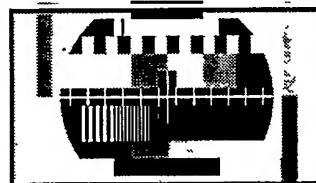
**16:9**  
transmission (letterbox)



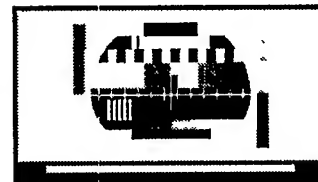
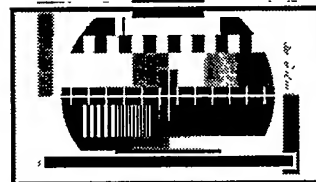
**MOVIE EXPAND 14:9**



**MOVIE EXPAND 16:9 (I)**



**MOVIE EXPAND 16:9 (II)**

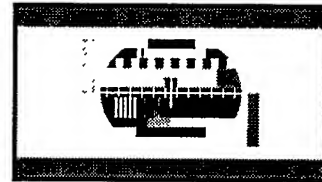
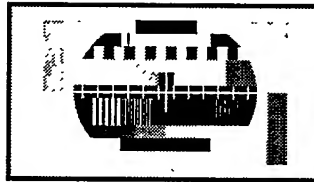


Selected Picture format

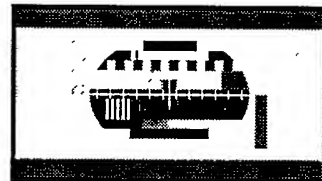
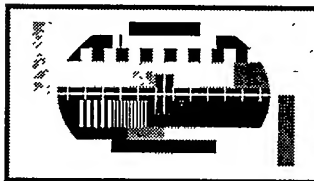
4:3  
transmission

16:9  
transmission (letterbox)

**SUPER WIDE**



**WIDE SCREEN**



15:9/16:9

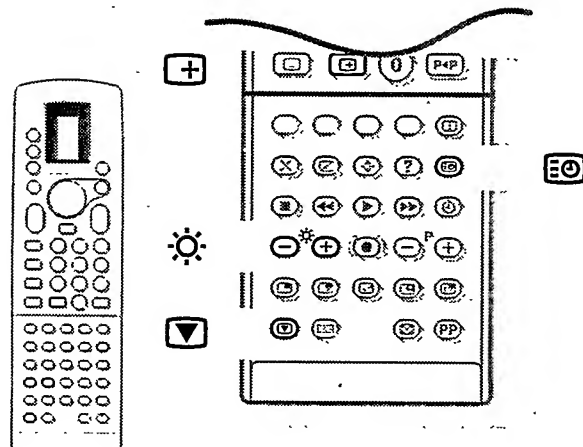
#### Making subtitles visible

When you are in Movie Expand 14:9 or 16:9 picture format you can manipulate your picture with the keys ▲ or ▼.

- Press the key ▲ to scroll up the picture to make subtitles visible.
- Press the key ▼ to scroll down the picture.

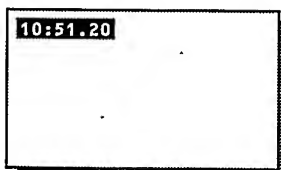
Picture up/down is not applicable with super wide and wide screen picture format.





## Permanent Programme Number

- Press **+** for a long time.
- ▷ The permanent programme number remains in the upper right corner of the screen when it was off, or disappears when it was on.



## Clock

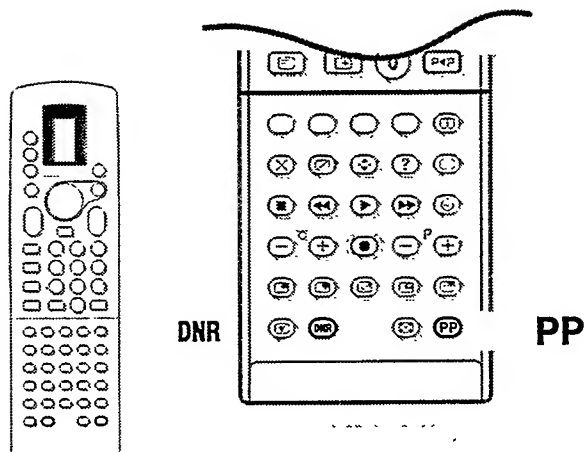
- Open the door of the remote control.
- Press **E**.
- ▷ The time, downloaded from the TV channel (with teletext) stored on programme number 1 or under the lowest favourite programme number, or entered manually in the Timers menu, appears in the upper left hand corner of the screen.  
This is not possible when Continuous Subtitles have been switched on and **CC** is displayed on the bottom of the screen. See Teletext, p. 32.
- Press **E** again in order to switch off the clock.

## Adjust Brightness

- Open the door of the remote control.
- Press **☀** - or **+** in order to adjust the brightness.

## Freeze the picture

- Open the door of the remote control.
- Press **▾**.
- ▷ The picture is frozen.
- Press **▾** in order to get moving pictures again.



## DNR

With DNR you can reduce the image noise and so improve picture quality when receiving weak signals.

- Open the door of the remote control.
- Press **DNR** repeatedly to select **DNR Min**, **DNR Med**, **DNR Max** or **DNR Off**.

**DNR Med** offers you optimum picture quality and is the usual setting for normal strength signals.

**DNR Max** should only be used for poor picture quality.

- ▷ Your selection appears for a moment at the top of the screen.

The setting is stored in memory for the selected TV channel after the indication disappeared from the screen.

You can select the DNR setting for each channel separately.

## PP key

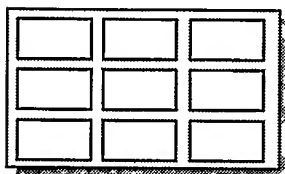
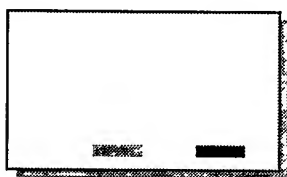
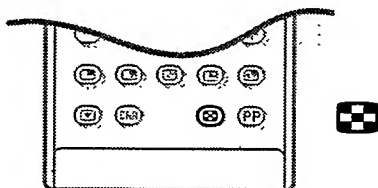
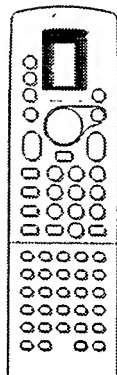
With the green **PP** key you can call up the picture and sound adjustments which have been stored with General PP Store in the Features menu, p. 20.


- Open the door of the remote control.
- Press **PP**.




## Mosaic screen

(for TV sets with the Picture in Picture option)




- Open the door of the remote control.
- Press .
- ▷ A menu line **MOSAIC** appears on the bottom of the screen. It contains three functions : **Scan**, **Photo Fin.**, **Strobe**.
- Select with the keys ◀ or ▶ the function you want to activate and press **OK**.

### Scan


- ▷ A scan of the stored TV channels is performed, starting with the favourite programme stored under the lowest programme number. Only TV channels placed in the favourite list are displayed. On the last position, a live picture is shown of the programme that was displayed before the mosaic screen was switched on, except when you were watching a picture from a peripheral. In this case the picture of the following favourite TV channel appears in the last position.
- Press **OK** again.
- ▷ A following series of stored TV channels from the favourite list or programmes from switched on peripherals is scanned. Each mosaic picture will contain its identifying programme number and name.
- Select a TV channel with the digit keys.
- ▷ The mosaic screen disappears and the selected TV programme is displayed.
- Press  to interrupt the scan function and to switch off the mosaic screen.

*Never perform a scan while recording a TV programme with a video recorder recording from **EXTERNAL 1** or **2** since the scan will be recorded on tape.*

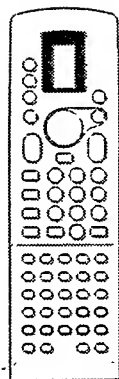
### Photo Finish

- ▷ The main picture is displayed in successive frozen pictures. The last picture on the bottom right will remain live.
- Press **OK** again.
- ▷ A new photo finish picture is displayed, overwriting the old one.
- Press  to switch off the photo finish function and the mosaic screen.

### Strobe

- ▷ The picture is reproduced image by image. So you get an interrupted movement.
- Press **OK** again.
- ▷ The picture is reproduced image by image at a faster speed.
- Press  to switch off the strobe function and to switch off the mosaic screen.

# Pip - Picture in Picture

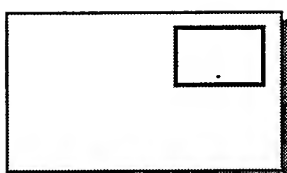
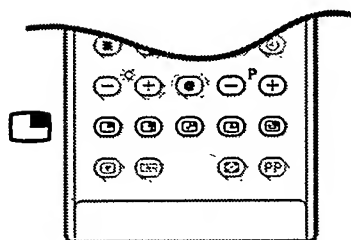


For TV sets with the Picture in Picture option.

With pip, Picture in Picture, you can call up a little screen within the main screen.

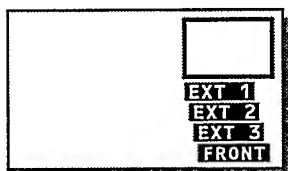
Thus at the same time you can watch a programme from other equipment, connected with a eurocable.

The picture in the small screen has no sound.



## Switch pip on and off

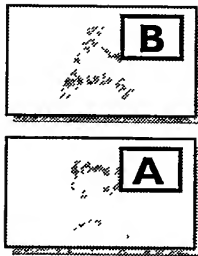
- Open the door of the remote control.
- Press .
- ▷ The pip screen appears and the picture is the same as in the main screen.
- ▷ The name of the pip programme appears briefly on the main screen.
- Press again to switch pip off.




## Select pip connections

- Press repeatedly.
- ▷ The name of the connections appears.  
If any other peripheral is connected and switched on, its programme appears in the pip screen.
- Select on your video recorder the TV channels which you have stored in it.




For connecting equipment to **EXTERNAL 1**, **EXTERNAL 2**, **EXTERNAL 3** or **FRONT**, see Connect Peripheral Equipment, p. 35.

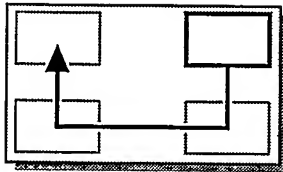


## Switch screens


- Press .
- ▷ The main screen and the pip screen exchange places.  
If the TV channel is only in the pip screen and not in the main screen, then use  
- **P** + of the pip keys in order to change your TV channel in the pip screen.

## Select Still Picture

- Press .
- ▷ The picture in the pip screen stands still.  
Even when pip is not switched on, the main screen will appear as a still picture in the pip screen. In this way you make a snapshot of the main screen picture.
- Press  again or select another channel in the pip screen in order to cancel the still picture.
- Press  to switch pip off.



## Move the pip screen

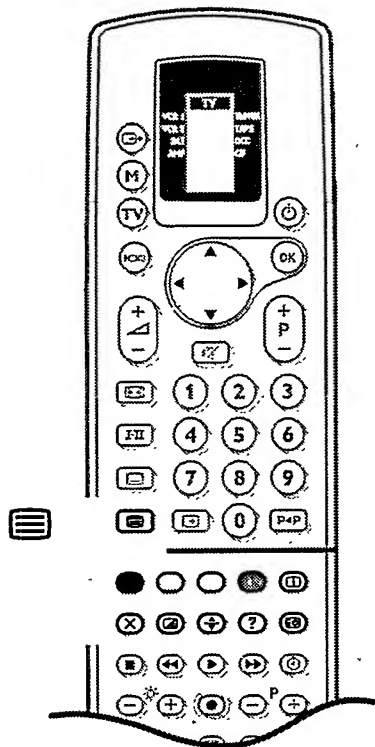
- Press .
- ▷ Each time you press this key, the pip screen moves to another corner of the main screen.

*If the main screen is a full expanded picture format, the pip screen only moves to the upper left hand corner of the main screen.*

# Teletext

Most TV channels broadcast information via teletext. Each channel which broadcasts teletext transmits a page with information on how to use its teletext system. Look for the teletext page with the main index (usually page 100).  
TV programmes are sometimes subtitled for the hard of hearing.

Depending on the TV channel, teletext is transmitted in different systems. The system utilised can be recognised by the options line at the bottom of the screen.  
The colours used in the options line correspond with the colour keys under the door of your remote control.



## About the Easy Text system

The Easy Text system makes use of a memory with a high level of intelligence. By making maximum use of this intelligence it is possible that in most cases the selected page appears on the screen almost immediately. The only condition is that the teletext broadcast of the particular TV channel is switched on for at least half a minute.



The major advantages of this Easy Text system are :

A considerable **reduced waiting time** by predicting what you will probably select and which results in :

- a fast and direct selection of previous and following pages which are in transmission
  - the precapturing of the page numbers referred to in the displayed page
  - the direct selection of the pages referred to in the options line
  - the creation of a **habit watcher list** : frequently used pages are put in a list of preferred pages so that they are immediately available afterwards.
- The pages are stored in the memory when switching off teletext or when switching to standby.



The precapturing of all the **subpages** to be controlled by the teletext user.

## Switch Teletext on and off

- Select the TV channel for the desired teletext broadcast.
- Press  in order to switch on the teletext.  
If teletext is switched on when a menu is on the screen, the menu will automatically be removed.
- ▷ The main index page appears on the screen together with two information lines at the top and one option line at the bottom of the screen.
- Press  again in order to switch off teletext.
- ▷ The TV channel reappears.

## Select a Teletext page

With the digit keys ..... **Or** With the option line

- Enter the desired page number with the digit keys.
  - ▷ The page counter seeks the page or the page appears immediately when the page number has been stored in the memory.
  - ▷ A message appears when you have entered a non-existent or an incorrect page number. Page numbers beginning with 0 or 9 do not exist.
  - Enter the correct page number.
- Select with the colour keys, corresponding to the coloured options at the bottom of the screen and depending on the teletext system the selected TV channel transmits,
    - the previous  or the following  pages
    - the 2 previously selected pages
    - another subject

## Quickly run through the teletext pages

- Press ▼ to run through the previous pages.
- Press ▲ to run through the following pages.

## Select the previously selected teletext page

- Press the P◀P key.
- ▷ The previously selected teletext page is displayed.

## Select subpages

When a selected teletext page consists of different subpages, one of the subpages appears on the screen.  
The coloured number in the first information line refers to the displayed subpage.

The other subpages can be selected in 2 ways :

With the keys ◀ or ▶.

The other subpage numbers appear in white as soon as the transmission has found them and they are stored in the memory so that they are available while the teletext page is on screen.

- Select with the keys ◀ or ▶ the previous or the following subpage.

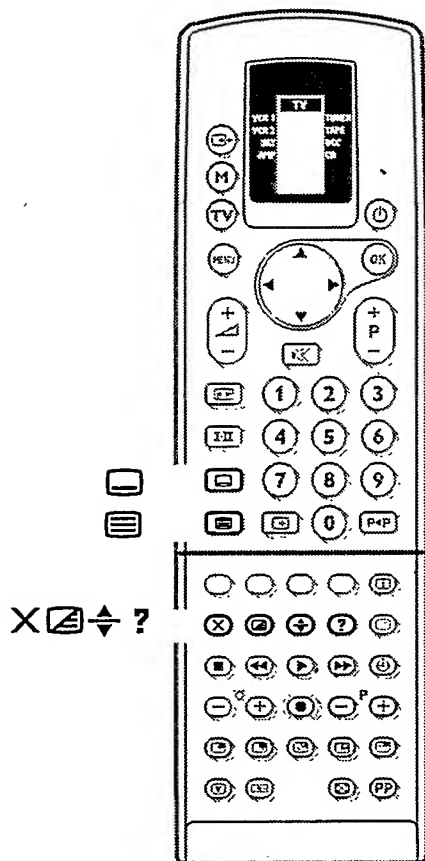
**or** By adding a subcode.

- Open the door of the remote control.
- Press [0].
- Enter the desired subpage with the digit keys : e.g. 3 for the third page of seven subpages.
- ▷ The TV searches for the selected subpage.
- Press [0] again in order to cancel the subcode.
- Press [0] again.
- ▷ The information line with the available subpages appears.

## Select the index teletext page

- Open the door of the remote control.
- Press the white colour key [i].
- ▷ The main index, usually p. 100, appears.

- or**
- Press MENU.
  - ▷ A T.O.P. overview of the teletext subjects available appears.  
Not all TV channels broadcast the T.O.P. teletext.  
When the teletext system is not T.O.P. teletext, a message appears at the top of the screen.
  - Select with the keys ◀, ▶, ▲ or ▼ the desired subject and pagenumber.
  - Press OK.
  - ▷ The selected page appears.



## Select Continuous Subtitles

TV channels which broadcast teletext often transmit certain programmes with subtitling. Sometimes more than one subtitle page is available. For each TV channel you can store a subtitle page which will be displayed continuously if the programme being broadcast is transmitted with subtitles.

- Press in order to switch on teletext.
- Select the proper subtitle page with the digit keys.
- ▷ The selected subtitle page appears and also the subtitles when the programme transmitted is subtitled.
- Press on the remote control.
- ▷ The message **Subtitle stored** appears.
- Press in order to switch off teletext.
- ▷ Every time a programme of the selected TV channel is subtitled, the subtitles will be available.
- When there are no subtitles available, only is displayed on the bottom of the screen.
- Press on the remote control to switch the subtitles on or off.
- ▷ The message **Subtitles ON** or **OFF** appears.

For every TV channel the subtitle page should be stored separately with the key on the remote control.

## Select Special teletext functions

- Press in order to switch on teletext.
- Open the door of the remote control.

### Interrupt

- Press .
- ▷ The TV programme appears.
- ▷ at the top of the screen indicates that you are still in the teletext mode. Before interrupting teletext, you can select a page number. The page number appears on your screen.
- Press again.
- ▷ Teletext reappears.

### Mix

- Press .
- ▷ The teletext page and the TV programme appear on the screen at the same time.
- Press again.
- ▷ Only the teletext page is displayed.

### Enlarge

- Press to enlarge the top half of the teletext page.
- Press the keys or to scroll the text line per line.
- Press again to enlarge the bottom half of the teletext page.
- Press once more to return to normal page size.

### Reveal

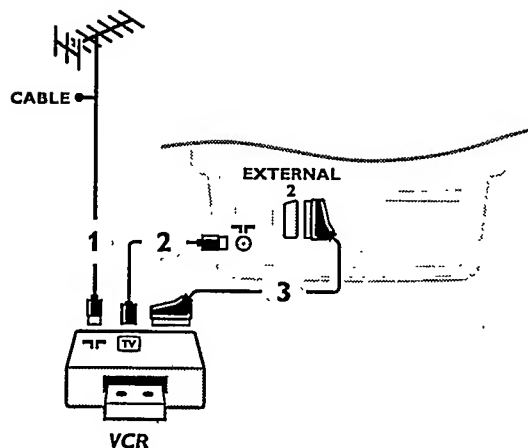
- Press to call up concealed information, such as solutions to riddles and puzzles.
- Press again in order to switch off the concealed information.



# Connect Peripheral Equipment

There is a wide range of audio and video equipment that can be connected to your TV.

The following connection diagrams show you where the different equipment should be connected at the back or the front side of the TV.



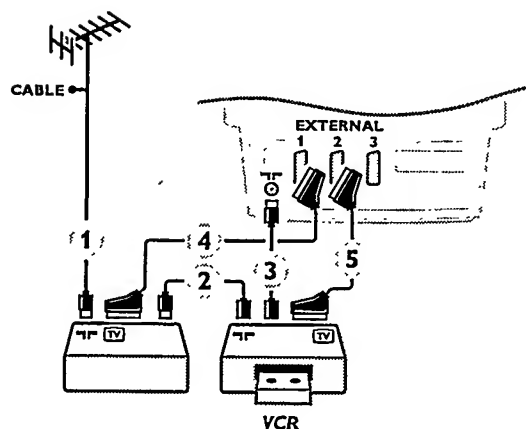
## TV and video recorder

- Connect the aerial cables ① and ② as shown opposite. Better picture quality can be obtained if you also connect a eurocable ③.

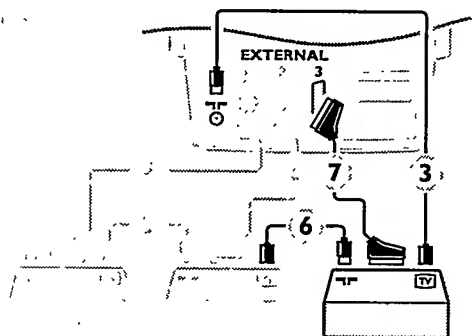
### Search for and store the test signal of the video recorder

- Unplug the aerial cable ① from the aerial socket of your video recorder.
- Switch on your TV and put the video recorder on the test signal. (See the handbook for your video recorder.)
- Enter the Installation menu via the Main menu.
- Search for the test signal of your video recorder in the same way as you searched for and stored the TV signals. See Installation, Searching for and storing TV channels, Manual Installation, p. 7.
- Store the test signal either under programme number 0 or between 50 and 99.
- Replace the aerial cable in the aerial socket of your video recorder once you have stored the test signal.

## TV, video recorder and other peripherals (except CD-i/Photo CD)



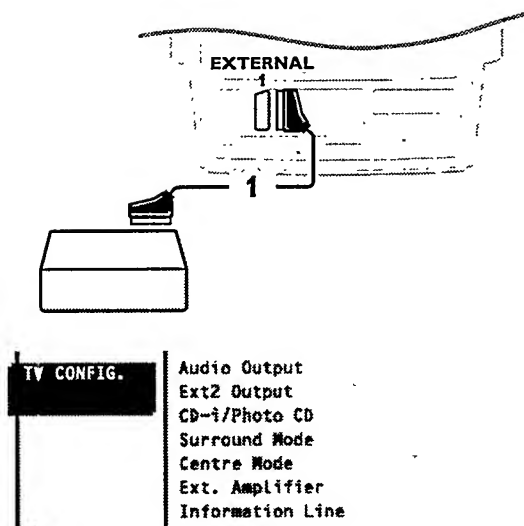
- Connect the aerial cables ①, ② and ③ as shown opposite. Better picture quality can be obtained if you also connect eurocable ⑤ to EXTERNAL 2 and a eurocable ④ to EXTERNAL 1 or 3.
- Look for the test signal of your peripheral in the same way as you do for a video recorder.



If you have more peripherals, they can also be connected to each other with an extra aerial cable ⑥ and an additional eurocable ⑦.

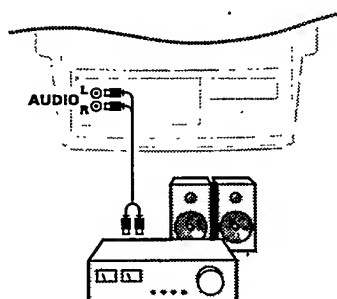
When a video recorder is connected to EXTERNAL 1 you can only record a programme from your TV.

Only when a video recorder is connected to EXTERNAL 2 it is possible to record a programme from your TV as well as from other connected equipment. See Record with your video recorder, p. 40.



## TV and a CD-i/Photo CD

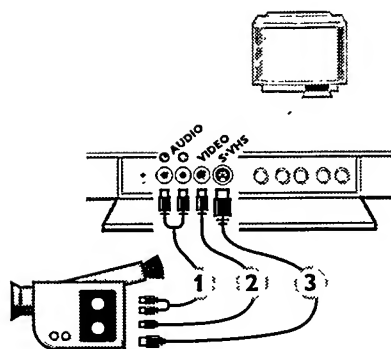
- Connect eurocable (1) as shown opposite.
- Press **MENU** on the remote control.
- ▷ The **MAIN MENU** appears on the screen.
- Keep the key **▼** pressed and select **INSTALLATION**.
- ▷ **INSTALLATION** lights up.
- Press **OK**.
- ▷ The **INSTALLATION** menu appears.
- Select **TV-Configuration** with the keys **▼** or **▲** and press **OK**.
- ▷ The **TV-CONFIG.** menu appears.
- Select **CD-i/Photo CD** with the keys **▼** or **▲**.
- ▷ **CD-i/Photo CD** lights up.
- Press the keys **◀** or **▶** to select **Present**.
- ▷ This offers you optimum picture quality for your CD-i or Photo CD.



## Audio equipment

You can listen to your TV sound via your audio equipment.

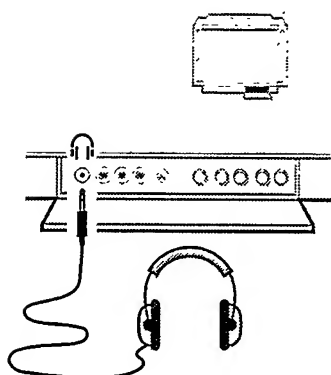
- Connect the audio cables to the audio input of your audio equipment and to **AUDIO L** and **R** at the back of your TV.
- Make your audio output selection in the TV Configuration menu. See p. 10.





## Camera and camcorder

- Connect your camera or camcorder at the front side of your TV.
- Connect the equipment to **VIDEO** (2) and **AUDIO L** (1) for mono equipment.
- Also connect **AUDIO R** (1) for stereo equipment.
- S-VHS quality with a S-VHS camcorder is obtained by connecting the S-VHS cables with the S-VHS input (3) and **AUDIO** inputs (1).





## Headphone


- Insert the plug into the headphone socket  at the front of the TV.
  - Press  on the remote control to switch off the internal loudspeakers of your TV.
- The headphone socket has an impedance of between 8 and 4000 Ohm and is of the 3.5 mm jack type.

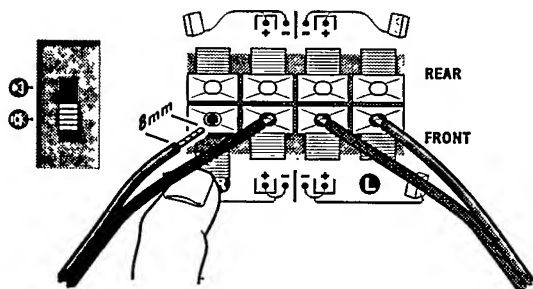
In the **SOUND** menu select **Headphone** to adjust the headphone volume and balance and to select the audio source for your headphone sound.  
See page 17.

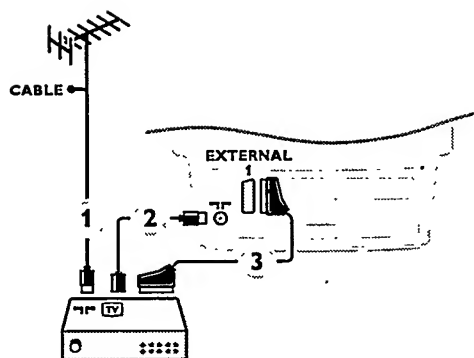


## Extra loudspeakers

You can replace the left and right internal loudspeakers of your set by two extra loudspeakers, min. 8 Ohm.

- Connect the loudspeakers to the connector clips at the back of the TV.
- Push the connector clip down and insert the ends of the wires into the openings :  
the negative wires to the black connector clips, the positive wires (the one with a black line) to the red connector clips.  
Do not insert the wires too far.
- Connect the front left loudspeaker to **FRONT L** and the front right loudspeaker to **FRONT R**.
- Put the loudspeaker switch on the back in the  position.
- ▷ The internal right and left loudspeakers of your TV are now switched off.





## Decoder

Cable TV offers you a wide choice of programmes. Most of them are free, others are to be paid for by the viewer. This means that you will need to subscribe to the broadcasting organisation whose programmes you wish to receive. This organisation will supply you a corresponding decoder unit to allow the programmes to be unscrambled.

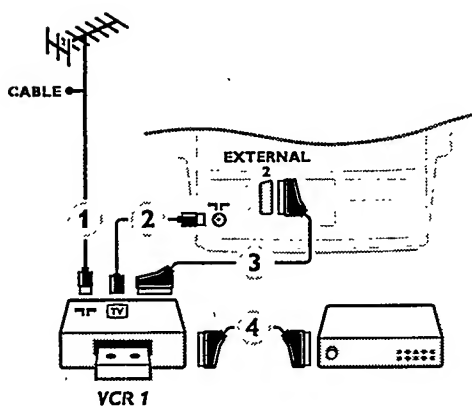
For further information, ask your dealer. See also the booklet supplied with your decoder.

### Connect a decoder with an aerial socket to the TV

- Connect the aerial cable (1) as shown alongside.  
When your decoder has a euroconnector you can obtain better picture quality if you connect a eurocable (3) to EXTERNAL 1.

### Connect a decoder without an aerial socket to the TV

- Connect the decoder to your TV with a eurocable (3) only.

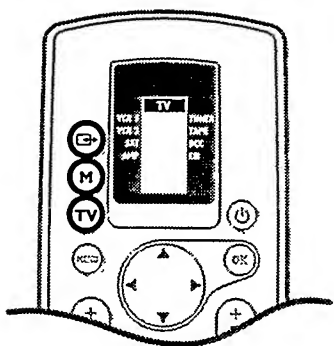


### Connect the decoder to the video recorder

Some video recorders have a special euroconnector for decoder.

- Connect a eurocable (4) to the euroconnector of your decoder and to the special euroconnector of your video recorder.  
See also the handbook of your video recorder.
- To connect your video recorder to the TV, see p. 35.  
See Define Decoder/Descrambler prog. numbers as well, p. 12.

If you want to connect more equipment to your TV, consult your dealer.



## Reproduce Picture and Sound of connected peripheral equipment

Most of the audio and video equipment from our range of products can be operated with the remote control of your TV.

Press **M** on the remote control repeatedly until the arrow in the display indicates the equipment you want to operate with this remote control.

To operate your TV again, first press the **TV** key and enter the programme number of the TV channel you want to watch with the digit keys.

### a. Reproduce picture and sound from equipment connected only with an **aerial cable**

- Switch your TV on.
- Select the programme number under which you have stored the test signal with the digit keys.
- Switch on your equipment.  
(See the handbook for your equipment.)
- ▷ The picture and/or sound is reproduced.


If you want to watch TV channels again.

- Enter the programme number of the TV channel which you want to watch with the digit keys.

### b. Reproduce picture and sound from equipment connected with a **eurocable**

- Switch your TV on.
- Switch on your equipment.
- ▷ Either the picture and/or the sound is reproduced or descrambled.


If this is not the case :

- Press  repeatedly until the designation **EXT1**, **EXT2**, **EXT3** or **FRONT** appears on the screen, according to where you connected your equipment at the back or the front of your TV.
- ▷ Either the picture and/or the sound is reproduced or descrambled.

If you want to watch TV channels again.

- Enter the programme number of the TV channel which you want to watch with the digit keys.

### c. Reproduce picture and sound from equipment connected to the **front** of the TV

- Switch your TV on.
- Press  repeatedly until the indication **FRONT** appears on the screen.
- Switch on your equipment.
- ▷ The picture is reproduced.

If you want to watch the TV picture again.

- Enter the programme number of the TV channel which you want to watch with the digit keys.

## Record with a video recorder

TV CONFIG.	Audio Output
	Ext2 Output
	CD-i/Photo CD
	Surround Mode
	Centre Mode
	Ext. Amplifier
	Information Line

If you have connected a S-VHS video recorder you can only record S-VHS-quality from a S-VHS peripheral connected to the front side of the TV. (E.g. from a S-VHS camcorder). In this case go on as follows :

- Press **MENU**.
- Select **TV-Configuration** in the **INSTALLATION** menu with the keys **▲** or **▼** and press **OK**.
- Select **Ext2 Output** with the keys **▲** or **▼**.
- Select **S-VHS Quality** with the keys **◀** or **▶**.

In all other cases, whether you record with a VHS or S-VHS video recorder, select **VHS Quality**.

- Keep **MENU** pressed for a short while to switch off each menu.

### 1. Record a TV programme

- only using an **aerial cable**
  - Select the programme number on your video recorder.
  - Set your video recorder to record.  
(See the handbook for your video recorder.)
- using a **eurocable** connected to the euroconnector **EXTERNAL 2**

*With a video recorder connected to **EXTERNAL 2** it is possible to record a programme from your TV as well as from other connected equipment.*

- Select the programme number on the TV.
- Press **MENU**.
- Select **FEATURES** with the keys **▼** or **▲** and press **OK**.
- Select **Recording Source** with the keys **▼** or **▲**.
- Press **◀** or **▶** to select the source you want to record : **Auto.** or **TV**.
- Select **Auto.** if you want to record what you are watching on the screen.
- Select **TV** when you want to record a programme from a TV channel while you are watching a programme from connected equipment (2nd VCR, CD-i,...).
- Press **MENU** twice.
- ▶ The **FEATURES** menu and the **MAIN MENU** disappear.
- Set your video recorder to record.  
(See the handbook for your video recorder.)

- using a **eurocable** connected to the euroconnector **EXTERNAL 1**

*With a video recorder connected to **EXTERNAL 1** you can only record a programme from your TV.*

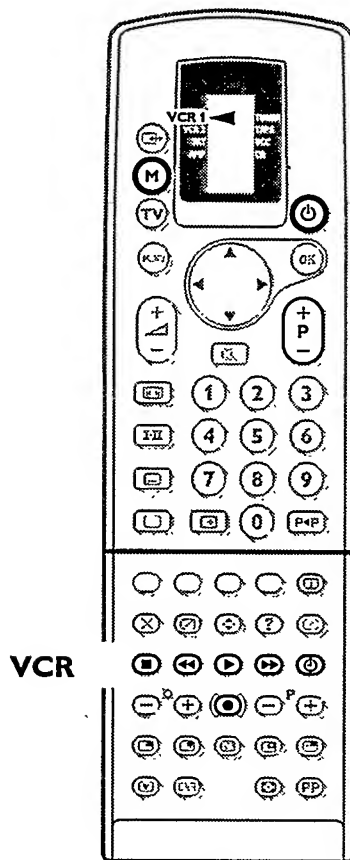
- Select the programme number on the TV.
- Set your video recorder to record.  
(See the handbook for your video recorder.)

### 2. Record a programme from Audio/Video equipment connected to **EXTERNAL 1, EXTERNAL 3 or FRONT**

- Switch on the equipment.
- Press **MENU**.
- Select **FEATURES** with the keys **▼** or **▲** and press **OK**.
- Select **Recording Source** with the keys **▼** or **▲**.
- Select the connection **EXT1, EXT3 or FRONT** from which you want to record with the keys **◀** or **▶**.
- Press **MENU** twice.
- ▶ The **FEATURES** menu and the **MAIN MENU** disappear.
- Set your video recorder to record.  
(See the handbook for your video recorder.)

FEATURES	Sleeptimer
	Child Lock
	General PP store
	Message
	Timers
	Recording Source

1948



Most of the audio and video equipment from our range of products can be operated with the remote control of the TV.

- Press repeatedly on the **M** key of the remote control until the designation **VCR1** or **VCR2** is indicated by the arrow and according to which connected video recorder you want to operate.
- Press one of the video recorder keys of the remote control :

- for stop

◀◀ for rewind

► for play


▶▶ for wind

 for timer

● for record

**P** to run quickly through the TV channels from your video recorder tuner

The digit keys to select TV channels from your video recorder tuner

The standby key  to switch off the video recorder temporarily.

# Tips

## Care of the screen

Clean the TV with a slightly damp soft cloth. Do not use abrasive solvent as it can damage the TV screen coating layer.

## Poor Picture

Have you selected the correct TV system ? Is your TV set or house aerial located too close to loudspeakers, non-earthed audio equipment or neon lights, etc. ?

Mountains or high buildings can cause double pictures or ghost images.

Sometimes you can improve the picture quality by changing the direction of the outside aerial.

Is the picture or teletext unrecognisable ?

Check if you have entered the correct frequency. See Installation, p. 8.

Are brightness and contrast out of adjustment ? Press the **PP** key.

Switch off your TV overnight with **⓪** on the front of the TV.

Sometimes poor picture quality is possible when having activated a S-VHS camera or camcorder connected to the front of your TV and another peripheral is connected to **EXT1** or **EXT2** at the same time. In this case switch off one of the other peripherals.

## No picture

Is the aerial connected properly ? Are the plugs tightly connected in the aerial socket ? Is the aerial cable in good condition and does it have suitable plugs ? Are the connection facilities to a possible second TV in good condition ? If in doubt, consult your dealer.

**No picture** means that the aerial peripheral equipment is transmitting no picture.

Have you pressed the correct keys on the remote control ? Try once more.

Did you press **⏮** again after switching on teletext ?

Has the child lock been switched off ?

See Features, p. 20.

## Sound

Did you perhaps interrupt the sound with the **⏮** key ? Were the internal loudspeakers switched off by the switch on the back of your TV set ? See Extra loudspeakers, p. 37. Is the sound coming out of only one loudspeaker ? Is the balance perhaps set to one extreme ? See **SOUND** menu, p. 16.

Select **Spatial On** in the Sound menu if there is no sound coming out of the extra loudspeakers at the back. See Spatial, p. 17.

## Remote control

If your TV no longer responds to the remote control. Check whether the remote control is in the TV operation position. Press the **TV** key once more. Perhaps the batteries are exhausted. See Preparation, p. 4.

You can still use the Local Menu keys at the front of your TV.

## Menu

Have you selected the wrong menu ? Press **MENU** again to exit from the menu.

## Connections

Check whether your peripheral equipment is properly connected. See p. 35.

Have you switched on the peripheral equipment ?

## No solution

Switch your TV set off and then on again.

**Never attempt to repair a defective TV yourself.**

Check with your dealer or call a TV technician when in doubt.

## End of life directives

Your new TV contains materials which can be recycled and reused.

At the end of life specialised companies can dismantle the discarded TV to concentrate the reusable materials and to minimise the amount of materials to be disposed of.

Please ensure you dispose of your old TV set in accordance with any local regulations.

## How to dispose of exhausted batteries ?

The Philips batteries supplied do not contain the heavy metals mercury and cadmium. Nevertheless in many countries exhausted batteries may not be disposed of with your household waste. Please ensure you dispose of exhausted batteries according to local regulations.

# Index

- a** analogue, 17
  - audio equipment, 36
  - audio output, 10
  - automatic installation, 6
- b** balance, 16
  - bass, 16
  - bilingual broadcast, 26
  - brightness, 27
- c** C-channels, 8
  - camcorder, 36
  - CD-i / Photo CD, 36
  - centre volume, 18
  - child lock, 20
  - clock, 27
  - colour, 14
  - colour keys, 32
  - contrast, 14
  - country, 5
- d** decoder/descrambler, 12
  - digital, 17
  - digital options, 15
  - DNR, 26
  - Dolby 3 Stereo, 18
  - Dolby Pro Logic, 18
  - dynamic contrast, 15
- e** easy text, 32
  - eurocable, 35
  - extra loudspeakers, 37
- f** favourite programmes, 10
  - features, 20
  - freeze, 27
  - frequency, 8
- g** general PP store, 20
  - give name, 9
  - graphic equalizer, 16
- h** hall, 18
  - headphone, 37
  - hue, 14
- i** info on screen, 26
  - information line, 11
  - installation, 6
  - interrupt the sound, 13
- l** language, 5
  - local menu, 19
  - loudness, 17
- m** main menu, 14
  - manual installation, 7
  - menu language, 5
  - message, 21
  - mono, 17
  - mosaic screen, 29
- p** peripheral equipment, 35
  - permanent programme number, 26
  - personal preferences, 27
  - photofinish, 29
  - picture, 14
  - picture format, 24
  - pip, picture in picture, 30
  - programme list, 23
  - Pro Logic, 18
- r** rear volume, 18
  - recording, 40
  - recording source, 23
  - remote control, 4
  - reshuffle, 9
- s** S-channels, 8
  - search for TV channels, 7
  - select TV channels, 13
  - select TV system, 7
  - selection mode, 7
  - sharpness, 14
  - sleeptimer, 20
  - smart controls, 14, 16
  - sound, 16
  - sound mode, 17
  - sound style, 16
  - spatial, 17
  - special teletext functions, 34
  - speech, 17
  - standby, 13
  - stereo, 17
  - store TV channels, 6
  - strobe, 29
  - subpages txt, 33
  - subtitles, 34
  - surround mode, 18
  - surround sound loudspeakers, 3
  - S-VHS, 40
  - switch TV on, 13
- t** teletext, 32
  - test, 18
  - timers, 22
  - tint, 15
  - treble, 16
  - TV configuration, 10
- v** video recorder, 35
  - volume, 13





# Table of TV frequencies.

Frequenztafel der Fernsehsender.

Liste des fréquences des émetteurs.

Frequentietabel TV-Zenders.

Tabella delle frequenze delle trasmissioni.

Lista de las frecuencias de las emisoras.

Lista das frequências dos emissores.

Liste over TV sanderne.

Tabell over TV-frekvenser.

# Tabell över TV-frekvenser.

TV-taajuustaulukko.

Κατάλογος συχνοτήτων πομπών.

# GB

The frequencies used by a cable company may differ from the frequencies on the table. Consult your cable company or your dealer for detailed information.

# D

In Kabelfernsehanlagen können Abweichungen von den in den Frequenztabellen aufgeführten Frequenzen vorkommen. Bitte wenden Sie sich an Ihren Fachhändler oder Ihre Kabelfernsehgeseilschaft, die Ihnen die zutreffenden Frequenzen mitteilt.

# F

Les fréquences utilisées par une société de télédistribution peuvent être différentes de celles sur la liste des fréquences. Consultez votre société de télédistribution ou votre revendeur pour des informations plus détaillées.

# NL

De frequenties die gebruikt worden door een kabelmaatschappij kunnen verschillen van deze op de tabel. Raadpleeg uw kabelexploitant of uw handelaar voor meer informatie.

# I

Le frequenze usate per una società di teledistribuzione possono essere differenti di quelle nella tabella. Consultate la società di teledistribuzione o il vostro rivenditore per informazione specifica.

# E

Las frecuencias utilizadas por las empresas de distribución de señal por cable, pueden ser diferentes de las que se encuentran en esta tabla. Consulte con su compañía de distribución de televisión por cable o con su distribuidor para que le proporcionen una información más detallada.

# P

As frequências utilizadas por uma sociedade de teledistribuição podem ser diferentes das indicadas na lista de frequências. Consultar a sociedade de teledistribuição ou o vendedor para informações mais detalhadas.

# DK

Frekvenser benyttet af kabel operatører kan være afvigende fra disse, kontakt deres kabel operatør eller forhandler for nærmere information.

# N

Frekvensene som benyttes på et kabelnett kan avvike fra de som er oppført i tabellen. Kontakt ditt kabel-TV selskap eller din forhandler for nærmere opplysninger.

# S

Frekvenserna som används i kabel-TV-nätet kan avvika från frekvenserna i tabellen. Kontakta ditt kabel-TV-bolag eller din radiohandlare för vidare information.

# SF

Kaapeliyhtiöiden käyttämät taajuudet voivat poiketa taulukossa olevista taajuuksista. Tarkat tiedot saat kaapeliyhtiöstä tai myyjältä.

# GR

Οι συχνότητες που χρησιμοποιούνται από μια εταιρεία τηλεπικοινωνιών είναι δυνατόν να είναι διαφορετικές από αυτές που παρέχει ο κατάλογος. (Συμβουλευθείτε την εταιρεία τηλεπικοινωνιών ή τον πωλητή για λεπτομερέστερες πληροφορίες).

EUROPE	
CHANNEL	FREQ (MHz)
E2	48.25
E3	55.25
E4	62.25
E5	175.25
E6	182.25
E7	189.25
E8	196.25
E9	203.25
E10	210.25
E11	217.25
E12	224.25
S1	105.25
S2	112.25
S3	119.25
S4	126.25
S5	133.25
S6	140.25
S7	147.25
S8	154.25
S9	161.25
S10	168.25
S11	231.25
S12	238.25
S13	245.25
S14	252.25
S15	259.25
S16	266.25
S17	273.25
S18	280.25
S19	287.25
S20	294.25
H1	303.25
H2	311.25
H3	319.25
H4	327.25
H5	335.25
H6	343.25
H7	351.25
H8	359.25
H9	367.25
H10	375.25
H11	383.25
H12	391.25
H13	399.25
H14	407.25
H15	415.25
H16	423.25
H17	431.25
H18	439.25
H19	447.25
21	471.25
22	479.25
23	487.25
24	495.25
25	503.25
26	511.25
27	519.25
28	527.25
29	535.25
30	543.25
31	551.25
32	559.25
33	567.25
34	575.25
35	583.25
36	591.25
37	599.25
38	607.25
39	615.25
40	623.25
41	631.25
42	639.25
43	647.25
44	655.25
45	663.25
46	671.25
47	679.25
48	687.25
49	695.25
50	703.25
51	711.25
52	719.25
53	727.25
54	735.25
55	743.25
56	751.25
57	759.25
58	767.25
59	775.25
60	783.25
61	791.25
62	799.25
63	807.25
64	815.25
65	823.25
66	831.25
67	839.25
68	847.25
69	855.25

EASTERN EUROPE	
CANAL	FREQ (MHz)
R1	49.75
R2	59.25
R3	77.25
R4	85.25
R5	93.25
R6	175.25
R7	183.25
R8	191.25
R9	199.25
R10	207.25
R11	215.25
R12	223.25
S1	105.25
S2	112.25
S3	119.25
S4	126.25
S5	133.25
S6	140.25
S7	147.25
S8	154.25
S9	161.25
S10	168.25
S11	231.25
S12	238.25
S13	245.25
S14	252.25
S15	259.25
S16	266.25
S17	273.25
S18	280.25
S19	287.25
S20	294.25
H1	303.25
H2	311.25
H3	319.25
H4	327.25
H5	335.25
H6	343.25
H7	351.25
H8	359.25
H9	367.25
H10	375.25
H11	383.25
H12	391.25
H13	399.25
H14	407.25
H15	415.25
H16	423.25
H17	431.25
H18	439.25
H19	447.25
21	471.25
22	479.25
23	487.25
24	495.25
25	503.25
26	511.25
27	519.25
28	527.25
29	535.25
30	543.25
31	551.25
32	559.25
33	567.25
34	575.25
35	583.25
36	591.25
37	599.25
38	607.25
39	615.25
40	623.25
41	631.25
42	639.25
43	647.25
44	655.25
45	663.25
46	671.25
47	679.25
48	687.25
49	695.25
50	703.25
51	711.25
52	719.25
53	727.25
54	735.25
55	743.25
56	751.25
57	759.25
58	767.25
59	775.25
60	783.25
61	791.25
62	799.25
63	807.25
64	815.25
65	823.25
66	831.25
67	839.25
68	847.25
69	855.25

FRANCE	
CANAL	FREQ (MHz)
2	55.75
3	60.50
4	63.75
5	176.0
6	184.0
7	192.0
8	200.0
9	208.0
10	216.0
B	116.75
C	128.75
D	140.75
E	159.75
F	164.75
G	176.75
H	188.75
J	200.75
K	212.75
L	224.75
M	236.75
N	248.75
O	260.75
P	272.75
Q	284.75
H1	303.25
H2	311.25
H3	319.25
H4	327.25
H5	335.25
H6	343.25
H7	351.25
H8	359.25
H9	367.25
H10	375.25
H11	383.25
H12	391.25
H13	399.25
H14	407.25
H15	415.25
H16	423.25
H17	431.25
H18	439.25
H19	447.25
21	471.25
22	479.25
23	487.25
24	495.25
25	503.25
26	511.25
27	519.25
28	527.25
29	535.25
30	543.25
31	551.25
32	559.25
33	567.25
34	575.25
35	583.25
36	591.25
37	599.25
38	607.25
39	615.25
40	623.25
41	631.25
42	639.25
43	647.25
44	655.25
45	663.25
46	671.25
47	679.25
48	687.25
49	695.25
50	703.25
51	711.25
52	719.25
53	727.25
54	735.25
55	743.25
56	751.25
57	759.25
58	767.25
59	775.25
60	783.25
61	791.25
62	799.25
63	807.25
64	815.25
65	823.25
66	831.25
67	839.25
68	847.25
69	855.25

ITALY	
CANALE	FREQ (MHz)
A	53.75
B	62.25
C	82.25
D	175.25
E	183.75
F	192.25
G	201.25
H	210.25
H1	217.25
S1	105.25
S2	112.25
S3	119.25
S4	126.25
S5	133.25
S6	140.25
S7	147.25
S8	154.25
S9	161.25
S10	168.25
S11	231.25
S12	238.25
S13	245.25
S14	252.25
S15	259.25
S16	266.25
S17	273.25
S18	280.25
S19	287.25
S20	294.25
H1	303.25
H2	311.25
H3	319.25
H4	327.25
H5	335.25
H6	343.25
H7	351.25
H8	359.25
H9	367.25
H10	375.25
H11	383.25
H12	391.25
H13	399.25
H14	407.25
H15	415.25
H16	423.25
H17	431.25
H18	439.25
H19	447.25
21	471.25
22	479.25
23	487.25
24	495.25
25	503.25
26	511.25
27	519.25
28	527.25
29	535.25
30	543.25
31	551.25
32	559.25
33	567.25
34	575.25
35	583.25
36	591.25
37	599.25
38	607.25
39	615.25
40	623.25
41	631.25
42	639.25
43	647.25
44	655.25
45	663.25
46	671.25
47	679.25
48	687.25
49	695.25
50	703.25
51	711.25
52	719.25
53	727.25
54	735.25
55	743.25
56	751.25
57	759.25
58	767.25
59	775.25
60	783.25
61	791.25
62	799.25
63	807.25
64	815.25
65	823.25
66	831.25
67	839.25
68	847.25
69	855.25

Printed on recycled paper



Printed in Belgium

3104 305 4525.2